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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,941

08/19/2003

David M. Hockanson

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08/04/2004

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EXAMINER

CHERVINSKY, BORIS LEO

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,941

Applicant(s)

HOCKANSON ET AL.

Examiner

Boris L. Chervinsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 175. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "110" and "130" have both been used to designate socket (see Page 5, lines 10 and 24).
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the gaps of claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement

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sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is vague and indefinite because the gaps have not been shown in the drawings and the first and the second portions of the electromagnetic field have not been sufficiently defined in the specification as well as how they can be selected "to provide a predetermined amount of attenuation of electromagnetic emissions from the electronic device to a local environment".

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 10 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 10 is vague and indefinite because the first and the second portions of the electromagnetic field have not been sufficiently defined in the specification as well as how they can be selected "to provide a predetermined amount of attenuation of electromagnetic emissions from the electronic device to a local environment".

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1-4, 6-10, 11, 12, 14, 15, 19, 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Andric et al.

Andric discloses a circuit board adapted for use in a processor-based system, including: a socket 130 mounted on a surface of the circuit board 160, the socket being formed at least in part from an electrically conductive material; a heat sink 120 including an electrically conductive skirt 126 on a surface of the heat sink, the skirt configured to electrically couple to the socket and thereby to form an electromagnetic shield around the IC package positioned within the cavity 117, the electromagnetic shield including at least portions of the heat sink 120, the conductive skirt 126, the socket 130, and the

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ground plane; an electrically conductive and compressible gasket (col. 4, line 62) 155 positioned on the socket and extending at least partly around a circumference of the socket 130 and configured to couple electrically between the skirt and the socket and to form a portion of the electromagnetic shield; the electrically conductive skirt 126 and the heat sink 120 are formed as an integral unit; the electrically conductive skirt and the heat sink are formed from a substantially continuous piece of aluminum, the gaps of claim 10 are also disclosed (see col. 5, lines 13-19); the ground plane of the circuit board is inherent element of the circuit board and must be present in the device disclosed by Andric et al. The method steps of claims 19 and 20 are necessitated by the device structure as disclosed by Andric et al.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andric et al. in view of Lofland et al.

Andric discloses the claimed invention except gaskets to be made of compressible conductive polymer. Lofland discloses the heat sink integrated with EMI shielding having compressible gasket made of electrically conductive polymer. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the compressible gasket made of polymer material as disclosed by Lofland et

al. in the structure disclosed by Andric et al. for better thermal contact and EMI shielding.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andric et al. in view of Mertol.

Andric discloses the claimed invention except the plurality of vias electrically coupling the socket to the reference voltage plane. Mertol discloses the plurality of vias coupling the ground plane and EMI shield. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use vias to electrically couple EMI shield to the circuit board ground plane as disclosed by Mertol in the device disclosed by Andric et al.

12. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andric et al.

Andric discloses the claimed invention except the microprocessor. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use disclosed by Andric et al. structure for EMI shielding since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris L. Chervinsky whose telephone number is 571-272-2039. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on 571-272-2800 ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BORIS CHERVINSKY
PRIMARY EXAMINER

Boris L. Chervinsky
8/3/4